

What is claimed is:

1. A sealed electrical connector assembly, comprising:
2 a support structure;
a molded plastic connector housing overmolded about at least a portion of the
4 support structure at an interface area between the support structure and the connector
housing; and
6 a compliant layer deposited between the support structure and the
overmolded connector housing over at least a portion of said interface area to fill and seal
8 the portion of the interface area when the molded plastic housing cures.
2. The electrical connector assembly of claim 1 wherein said compliant layer
2 comprises a conformal film coated on the support structure in said at least a portion of said
interface area before the housing is overmolded on the support structure.
3. The electrical connector assembly of claim 2 wherein said conformal film
2 comprises a silicone adhesive.
4. The electrical connector assembly of claim 2 wherein said conformal film
2 comprises a thermoplastic elastomer.
5. The electrical connector assembly of claim 1 wherein said compliant layer
2 comprises a preformed component.
6. The electrical connector assembly of claim 1 wherein said interface area
2 comprises a tongue-and-groove structure.
7. The electrical connector assembly of claim 6 wherein said interface area
2 comprises a tongue on the support structure with the connector housing overmolded
thereabout.
8. The electrical connector assembly of claim 7 wherein said compliant layer
2 is deposited on said tongue prior to said connector housing being overmolded thereabout.

2 9. The electrical connector assembly of claim 8 wherein said tongue comprises a peripheral flange about a passage in the support structure in which the connector housing is molded.

2 10. The electrical connector assembly of claim 1 wherein said support structure comprises a two-part structure including a base part and a cover part forming an interior cavity therebetween, the cover part including a connector-receiving passage having
4 an upstanding peripheral flange thereabout, the connector housing being overmolded about the peripheral flange and in the passage.

2 11. The electrical connector assembly of claim 10 wherein said compliant layer is deposited about said peripheral flange.

2 12. A sealed electrical connector assembly, comprising:
2 a support structure in the form of a casing having an interior cavity, a connector-receiving passage communicating with the cavity and an upstanding flange about
4 the passage:
6 a molded plastic connector housing overmolded about the peripheral flange and in the passage; and
8 a compliant layer deposited about the peripheral flange of the support structure and about which the connector housing is overmolded to fill and seal any gap therebetween when the molded housing cures.

2 13. The electrical connector assembly of claim 12 wherein said compliant layer comprises a conformal film coated on the peripheral flange before the connector housing is overmolded thereabout.

2 14. The electrical connector assembly of claim 13 wherein said conformal film comprises a silicone adhesive.

2 15. The electrical connector assembly of claim 13 wherein said conformal film comprises a thermoplastic elastomer.

2 16. The electrical connector assembly of claim 12 wherein said compliant layer comprises a preformed component.

2 17. A sealed electrical connector assembly, comprising:
2 a first, rigid connector component;
4 a second, molded plastic connector component overmolded about at least a portion of the first connector component at an interface area therebetween; and
6 a compliant layer deposited between the connector components over at least a portion of said interface area to fill and seal the portion of the interface area when the molded plastic component cures.

2 18. The electrical connector assembly of claim 17 wherein said compliant layer comprises a conformal film coated on the first connector component in said at least a portion of said interface area before the second connector component is overmolded on the
4 first connector component.

2 19. The electrical connector assembly of claim 18 wherein said conformal film comprises a silicone adhesive.

2 20. The electrical connector assembly of claim 18 wherein said conformal film comprises a thermoplastic elastomer.

2 21. The electrical connector assembly of claim 17 wherein said compliant layer comprises a preformed component.

2 22. A method of fabricating a sealed electrical connector assembly, comprising the steps of:
4 providing a support structure;
6 depositing a compliant layer on the support structure in an interface area; and overmolding a molded plastic connector housing about at least a portion of the support structure including said interface area whereby said compliant layer fills and seals the interface area when the molded plastic housing cures.

2 23. The method of claim 22 including the step of providing said compliant layer as a conformal film coated on the interface area of the support structure before the housing is overmolded on the support structure.

2 24. The method of claim 23 including providing said conformal film of silicone adhesive material.

2 25. The method of claim 23 including providing said conformal film of thermoplastic elastomer material.